DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY FOR CIVIL WORKS

COMPLETE STATEMENT

OF

CHARLES R. SMITH
ASSISTANT FOR ENVIRONMENT AND REGULATORY AFFAIRS

BEFORE THE
SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES
COMMITTEE ON RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES

ON
H.R. 2753, ABANDONED MINE RESTORATION ACT OF 1999

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INTRODUCTION

Madam Chairman and members of the Subcommittee, I am Charles R. Smith, Assistant for Environment and Regulatory Affairs, Office of the Assistant Secretary of the Army for Civil Works. I am testifying on behalf of the Honorable Dr. Joseph W. Westphal, Assistant Secretary of the Army for Civil Works. Thank you for this opportunity to discuss the Army Corps of Engineers activities in the area of abandoned mine land restoration and to provide our views on H.R. 2753, the Abandoned Mine Restoration Act of 1999. My statement will consist of a discussion of the problems associated with abandoned and non-active mines, the Army's expertise and experience restoring abandoned mine lands, and our views on H.R. 2753.

EFFECTS OF ABANDONED MINE LANDS

Historically, it was common practice to abandon mine sites when the mineral extraction was completed. The land was left un-vegetated and exposed. Waste materials were left in piles or haphazardly dumped into mine cavities and pits. There was little concern for the environment and no thought of how the mining activities might adversely affect the surrounding ecosystem for years to come. Over time, stream systems and associated lands near abandoned mines became severely degraded. As a result, these water bodies and associated lands now support very few to no viable populations of aquatic, riparian, or terrestrial species. Additionally, the

lands have been rendered virtually unfit for reuse, either for development purposes or to serve as habitat for fish and wildlife species.

Abandoned mine lands (AML) continue to have significant adverse effects on the environment. Some of the types of environmental effects that occur at AML sites include subsidence, surface and groundwater contamination, erosion, sedimentation, chemical release, and acid mine drainage. Probably the most common and also most significant abandoned mine land problem presented to the environment and man is the occurrence of acid mine drainage.

Acid mine drainage (AMD) occurs when surface or groundwater flows through and off of mines and mine lands. AMD begins with the exposure of iron sulfide materials to air and water. The exposed, relatively insoluble sulfide materials are converted to soluble sulfuric acid and to iron compounds by oxidation. The sulfuric acid, in turn, dissolves other minerals such as manganese, aluminum, and calcium. Although these constituents can occur naturally in water in trace amounts, as a result of hydrologic and weathering processes, they are substantially increased in frequency and abundance due to mining activities. Both underground and surface mining create AMD pollution.

The resulting environmental impacts have received a great deal of attention, especially since AMD pollution has the potential to affect nearly every type of water use. It can increase costs to industrial, municipal, and navigational water users by corroding equipment and by requiring industries to install special water treatment systems. Relatively small amounts of AMD can also impede, and in many cases, prevent the use of surface waters for recreational uses such as swimming and fishing.

The Surface Mine Control and Reclamation Act of 1977 has provided an administrative procedure for states to prioritize and restore abandoned coal mines and some funding. The regulation of mining operations and the reclamation of abandoned coal mine lands have improved water quality and aquatic habitat, increasing the suitability and abundance of significant fish and wildlife resources. The restoration of streams through the abatement of acid mine drainage and the reduction of metal loading at abandoned coal mine lands has provided positive results without the loss of other natural resources within the ecosystem.

Unfortunately, this type of organization and structure does not exist for restoring abandoned non-coal sites around the country. At the State level, there are very few mechanisms to fill the gap. State and Federal land management agencies typically piece together whatever funding they can but they are clearly limited in the amount of restoration and safety work they can accomplish. Preliminary 1998 inventories of western States estimate the existence of at least 300,000 hard rock abandoned mine sites.

Abandoned non-coal mines, resulting from mining activities that occurred over the past 150 years, are scattered throughout the United States. These abandoned mines, which are located on private, State, and public lands, contain numerous public safety and environmental hazards such as open shafts and acid rock drainage. Most of the sites were mined and abandoned prior to the environmental regulations resulting from the Environmental Decade of the 1970s.

In 1991, the Western Governors Association (WGA) compiled data on impacted stream miles in a scoping study of inactive and abandoned non-coal mines. Analysis of the data, concluded the occurrence of approximately 3,350 damaged stream miles in Arizona, California, Colorado, Montana, New Mexico and Utah alone. Based on the Environmental Protection Agency's 303(d) lists of impaired stream segments in the western states, the number of stream miles affected by mine drainage could be much greater than the impacts estimated by the WGA.

A significant number of abandoned non-coal sites are located on Federal lands. The Bureau of Land Management and the U.S. Forest Service report that there are thousands of abandoned mines on the lands they manage.

CORPS ROLE IN ABANDONED MINE LANDS RESTORATION

Historically, our Nation's rich and abundant water and related land resources provided the foundation for our Nation's successful development and rapid achievement of preeminence within the international community. Our Nation's waters and waterways have been focal points for economic and social development, and the Army's Civil Works (CW) Program has made significant contributions to this development.

Since the passage of the Water Resources Development Act of 1986, the Nation has asked the Army to become increasingly involved in ecosystem restoration and protection activities. The purpose of the CW ecosystem restoration and protection initiatives is to restore and maintain the integrity of the Nation's waters. This was an objective established for federal agencies, including the Corps, in the Clean Water Act of 1977. Where ecosystems are degraded or disturbed, the Corps may recommend and implement solutions to maintain and restore the ecological resources and processes directly associated with or directly dependent upon the hydrologic regime.

For over 200 years, the Army Corps of Engineers has played a lead role responding to water resources challenges for the Nation. The Corps has learned, through this experience, that water is perhaps the most important attribute of ecosystem structure. Water has a significant influence on all the other attributes of ecosystems (eg. variety of fauna and flora structure and complexity, functional diversity). Consequently, the quality of water is vitally important to sustaining the functions and structure of ecosystems. Understanding the physical, chemical, and biological processes allows the Corps the opportunity to operate, maintain, and modify projects in ways that provide for sustainable human uses while protecting, restoring, and conserving the environmental values of the ecosystem.

The Corps has worked with non-Federal sponsors around the country on the development of AML restoration projects through study-specific authorization language as well as several existing authorities. Approximately 40 opportunities for AML restoration are currently in the planning, design, and construction phases. Section 216 of the River and Harbor and Flood Control Act of 1970, as amended, allows for the review of the operation of water resources projects for the purpose of improving the quality of the environment and has also been applied for the assessment of AML impacts on Corps project operations. In addition the Corps has

provided technical assistance and support to several other agencies for the restoration of abandoned mine lands.

The Corps manages its projects in accordance with applicable Federal and state environmental laws and regulations, using the four pillars of the Army's environmental strategy (conservation, prevention, restoration, and compliance). Corps operated projects and associated lands are susceptible to the adverse affects of abandoned mine lands. Currently, there are 15 Corps operated projects that are impacted by AML related effects, such as acid mine drainage. In response to these impacts, some of the Corps projects are specifically operated to improve water quality in the downstream reaches.

The Corps understands the National significance of abandoned mine land impacts on the environment and participates in official partnerships around the Nation. Due to the differences in environmental issues, and mine features these partnerships have been primarily regional in membership and mission.

The Corps is a signatory to the Statement of Mutual Intent on the Restoration and Protection of Streams and Watersheds Polluted by Acid Mine Drainage from Abandoned Mine Lands, which was designed to bring together federal, state, and local entities in an attempt to address and solve the environmental problems associated with abandoned coal mines in the Appalachian region. Heightened coordination among the interested parties has led to collaboration in the collection of information for the development of a geographic information system database. The Statement of Mutual Intent has also lead some of the signatories to initiate cost-shared studies for the purpose of restoring ecosystem function and structure on abandoned coal mine lands.

In December 1998, the Corps of Engineers established the Restoration of Abandon Mine Sites (RAMS) as a pilot program. The purpose of the RAMS Program is to support activities and priorities of the State, Federal and nonprofit entities, and is intended to enhance the present activities of the stakeholders. RAMS work includes restoration of all activities associated with abandoned mine lands including acid mine drainage, safety hazards, and ecosystem restoration. These activities are typically implemented through existing authorities, under our reimbursable work accomplished through the Corps Support for Others/Work for Others Program.

H.R. 2753

I would now like to focus on H.R. 2753. The Administration generally supports efforts to address environmental and, particularly, water quality problems caused by drainage from abandoned and inactive mines, but must oppose the bill.

First, we are concerned that H.R. 2753 lacks a clear environmental goal and, specifically, does not require compliance with the Clean Water Act or attainment of the water quality standards under that Act. Although the bill is intended to improve water quality, there is no requirement that the proposed actions be evaluated as to their capability to improve water quality or reduce the risk of exposure to hazardous substances. Second, H.R. 2753 could undercut fundamental principle of environmental policy -- that the "polluter should pay." The bill could provide a

vehicle for those responsible for the creation of releases of hazardous substances to minimize their fiscal obligations at the taxpayer's expense. No clean up should be undertaken where the effect would be to undercut any to hold the parties who created the pollution responsible. Third, at this time we believe that the Army Corps of Engineers should assist in this area primarily through its existing Support for Others/ Work for Others authority. Further, we are concerned that H.R. 2753 fails to make clear that clean up efforts will be undertaken on federally managed lands under the leadership and with the oversight of the responsible federal land management agency.

The Administration is currently reviewing the bill and is prepared to submit detailed views with respect to the bill's provisions.

CONCLUSION

Abandoned and inactive non-coal mine lands have left indelible scars on the Nation’s landscape, and these lands pose significant hazards to public safety. The impacts of these lands have affected adversely our Nation’s environmental health and the quality of life for many Americans.

We look forward to working with the Committee to improve the Federal Government's efforts to address abandoned mine land issues in a cost effective manner. I am pleased to have had the opportunity to appear before you today to discuss the challenges we face as we work toward restoring the degraded conditions on abandoned and inactive mine lands.

Madam Chairman, this concludes my testimony. I would be pleased to answer any questions you or the Subcommittee may have.